

CLAIMS

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- 2 1. An apparatus for validating a wiring diagram
- 3 comprising:
- 4 a. a computer having a controller card connected
- 5 to the computer bus,
- 6 b. a display unit having a multiplexer card,
- 7 c. at least one multiple wire connector module
- 8 electronically connected to said multiplexer
- 9 card,
- 10 C. said controller card controlling said
- 11 multiplexer card.
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- 13 2. The invention of Claim 1 wherein said connector
- 14 module has at least one wire.
- 15
- 16 3. The invention of Claim 2 wherein said apparatus has
- 17 a first connector module and a second connector
- 18 module, and said first connector module and said
- 19 second connector module are electronically combined
- 20 into a single connector module.
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- 22 4. A process for creating a wire list comprising the
- 23 steps of:
- 24 a. a controller sends a command to a multiplexer
- 25 card to select two wires,
- 26 b. sending a voltage at low current through the
- 27 two wires,
- 28 c. said multiplexer card determines the status of
- 29 the wires as being open or short,
- 30 d. said multiplexer card measures the value and
- 31 compares it to a set reference and determines
- 32 the status as being open or short, and
- 33 e. stores the results of the selected two wires
- 34 and proceeds with the next set of wires.

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2 5. A process for validating a wiring diagram manual
3 contained in a software database comprising the
4 steps of:
5 a. copy said wiring diagram manual database to a
6 temporary file,
7 b. sort said file by connector name with the
8 highest pin count pins within the connectors
9 sorted in ascending order,
10 c. assign manual pins to a test pin,
11 assign modules to said connectors, if said
12 connector has more than 32 pins
13 combine modules,
14 e. create diagram manual to test interface
15 diagram,
16 f. create a test learn format record and save to
17 test random access file, run test, create wire
18 list database in a compatible format as said
19 diagram manual, said wire list database having
20 the actual wire list,
21 i. if test locates differences between diagram
22 manual and said tested wires, display the
23 differences between original wire list and
24 actual wire list.
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